#### HISTORIC AMERICAN ENGINEERING RECORD

#### INDEX TO PHOTOGRAPHS

#### GRAND VALLEY DIVERSION DAM

HAER CO-90

Half a mile north of intersection of I-70 & Colorado State Route 65 Cameo vicinity Mesa County Colorado

Gianfranco Archimede, photographer, Winter 2003-2004.

Original photographs and plans for HAER CO-90-16 - HAER CO-90-51 are in possession of Grand Valley Users Association, Grand Junction, Colorado.

#### INDEX TO BLACK AND WHITE PHOTOGRAPHS

CO-90-1	Oblique overview, looking north-northeast, of south elevation of diversion dam, showing all seven rollers, four gatehouses, and four piers. Note also the paved west river bank and training wall
CO-90-2	Oblique overview, looking northeast, of south side of diversion dam, showing western profiles of towers, piers, and rollers. Note lateral recesses in piers for gate operating mechanisms. Southeast sluiceway wall in foreground.
CO-90-3	Oblique view, looking east-southeast, of main gatehouse, main entrance, and battery storage house. East side of canal wall in foreground
CO-90-4	Oblique overview, looking east-southeast, of fish ladder construction activity after dewatering of north side. The east abutment wall, concrete crest, and north side apron are exposed. Easternmost roller gate (raised position) and service bridge at upper right
CO-90-5	Oblique view, looking south of the concrete crest and apron after dewatering of north side. The east abutment wall, is at left.  Easternmost roller gate (raised position) and service bridge at top

#### GRAND VALLEY DIVERSION DAM

HAER CO-90

## INDEX TO PHOTOGRAPHS Page 2

CO-90-6	Oblique overview, looking southeast, of north side of diversion dam, showing western profiles of towers, piers, and rollers.  Northeast sluiceway wall in foreground
CO-90-7	Oblique overview, looking west-southwest, of north side of diversion dam, showing eastern profiles of towers, piers, and rollers. Headworks in background
CO-90-8	Oblique overview, looking south, of the west side (outlet) of headworks and the beginning of the government High Line Canal. Main gatehouse at center
CO-90-9	Oblique view, looking west-northwest, of east side (inlet) of headworks, showing nine slide gates. Main gatehouse and service bridge at left, railroad grade in the background
CO-90-10	Oblique view, looking south-southeast, of the west side (outlet) of headworks. Main gatehouse on right
CO-90-11	Oblique view, looking east-northeast, of top of diversion dam. Service bridge on left, gatehouse and roller gate (raised position) on right
CO-90-12	Oblique view, looking west, of top side of diversion dam, also showing eastern profiles of piers and gatehouses. Roller gate (raised position) on right. Note detail of extension shield that, when lowered to a secure position against the dam sill, creates a virtually impervious seal
CO-90-13	Oblique view, looking west-southwest, of top side of diversion dam, showing roller gate operating mechanism (within pier recess) and lift mechanism (within gatehouse). Service bridge is on right, and 60-foot-long roller gate (raised position) over sluiceway is on left
CO-90-14	Profile view, looking west-southwest, of pier and roller gate lift mechanism. Roller gate in foreground is in lowered position. Service bridge is in upper right.
CO-90-15	Oblique view, looking southwest, of roller gate hoist mechanism situated in the easternmost gatehouse. The hoist control panel is at left

## GRAND VALLEY DIVERSION DAM

## HAER CO-90

## INDEX TO PHOTOGRAPHS Page 3

CO-90-16	"No. 64. View of Grand River looking along the axis of proposed diversion dam. H.T.C., Aug. 20, 1913."
CO-90-17	"U.S. Reclamation Service, Grand River Dam, topographical map of dam site and construction plant. September 15, 1914."
CO-90-18	Copy of plan with no title block. "Recd - 6-28-'14" in pencil on lower right corner. This date, two months prior to cancellation of the Reclamation Service's contract with Machinenfabrik, suggests that the drawing was prepared by the German firm
CO-90-19	"U.S.R.S., Grand Valley Project, Colo. Sprocket, shaft and chain for 70 ft. roller hoist. May 14, 1915." Note that on this and other working drawings of the roller gates, the German manufacturer/patent holder is not acknowledged
CO-90-20	"U.S.R.S. Dept of the Interior. Grand Valley Project - Colorado. Grand River Diversion Dam. Control for roller hoists. 20 May 1915."
CO-90-21	"Dept. of Interior United States Reclamation Service Grand Valley Diversion Dam rolling crest sections of 70' roller specifications No. 285 January 1915"
CO-90-22	"Dept. of the Interior, U.S. Reclamation Service, Grand Valley Project - Colorado. Operating mechanism for regulator gates. Grand River Dam." No date specified
CO-90-23	"Department of the Interior U.S. Reclamation Service Grand Valley Project - Colo. Grand River Diversion Dam Canal Gates - Automatic control." No date specified
CO-90-24	"No. 146. Looking west along dam. East side abutment." Note sluiceway and headgates at center rear of photograph; cofferdam at center right; and the screening and mixing plant at lower right. Rail cars are on the railroad grade in background
CO-90-25	"No. 148. Diversion gates." These are the 9 headgates to the Main Line Canal. Note the cross-river cable way and associated pier
CO-90-26	"No. 149. Diversion dam. Panorama. See no. 150."

#### GRAND VALLEY DIVERSION DAM

## HAER CO-90

## INDEX TO PHOTOGRAPHS Page 4

	Page 4
CO-90-27	"No. 144. Grand Valley Diversion Dam, showing high canyon walls."
CO-90-28	"Department of the Interior U.S. Reclamation Service Grand Valley Project, Colo. Grand River Dam and headworks general plan revised Aug. 13, 1914 and Aug. 29, 1914."
CO-90-29	"No. 147. Forms in place. East side abutment and concreting plant."
CO-90-30	"United States Reclamation Service, Grand River Dam, pier "A" and east side regulator gate wall." No date specified
CO-90-31	"U.S. Reclamation Service, Grand River Dam, plan & elevations gatehouse - pier 'B,' April 19, 1915."
CO-90-32	"U.S. Reclamation Service, Grand River Dam, details of pier 'B,' Oct. 14, 1914."
CO-90-33	"U.S. Reclamation Service, Grand River Dam, details of piers 'C' & 'E,' Oct. 10, 1914."
CO-90-34	"U.S. Reclamation Service, Grand River Dam, details of pier 'G,' Sept. 29, 1914."
CO-90-35	"U.S. Reclamation Service Grand River Dam details of piers 'D' & 'F,' Oct. 25, 1914."
CO-90-36	"United States Reclamation Service, Grand River Dam, plan & sections of power-house." No date specified
CO-90-37	"Dept. of the Interior, U.S. Reclamation Service, Grand Valley Project - Colo., house for storage battery diversion dam. 5-24 -1916."
CO-90-38	"United States Reclamation Service Grand River Dam side elevation & sections gate houses - piers D & F." No date specified
CO-90-39	"No. 170. Roller crest dam. Grand Valley Project. 1915." Note cross-river cableway, and important component of the construction plant
CO-90-40	"No. 167. Rolling crest dam. Grand Valley Project. 1915."

# GRAND VALLEY DIVERSION DAM HAER CO-90

### INDEX TO PHOTOGRAPHS Page 5

CO-90-41	"No. 169. Congressional party visiting the roller crest dam in 1915. Dedication."
CO-90-42	"No. 175. View showing regulator gates and temporary equipment for hoisting the sluiceway roller. F.E.D. June, 1916."
CO-90-43	Copy of historic photographs on file at Grand Valley Users Association. No date or caption was available. Note confined canyon and difficulty of relocating transportation routes
CO-90-44	"No. 172. General view of the dam, looking downstream from the east end. F.E.D. June, 1916." Compare this historic image, taken upon dam completion (1916), with current-condition photograph HAER CO-90-1. The dam retains a remarkable degree of integrity of design and setting
CO-90-45	"No. 182. Grand Valley Diversion Dam. June, 1917. R.B.D." Structures on the west side of the river below the dam are three bunkhouses, a mess hall, hospital, doctor's residence, engineer's residence, and outbuildings."
CO-90-46	"No. 187. Grand River Diversion Dam. June, 1917. R.B.D."
CO-90-47	No. 176. View of roller A-B service bridge and power house from upstream side. F.E.D. June 1916."
CO-90-48	"P8-400-564 Grand Valley Project - view of GV Diversion Dam on Col. River completed in 1915 by BOR to divert water to irrigate the Grand Valley Project. 7-18-58 by Stan Rasmussen." Note integration of the dam and canal headgate at center left, proximity of the river and railroad tracks at lower left, and gatekeeper's house on lower right
CO-90-49	"No. 190. Grand Valley Diversion Dam. Diversion gates, water flowing into high line. June, 1917. R.B.D."
CO-90-50	"No. 173. View of roller A-B raised to maximum height, and adjoining hoist house. F.E.D. June, 1916."
CO-90-51	"No. 184. Grand River Dam. June, 1917. R.B.D."